



LOGISTICS STUDIES OFFICE

FINAL REPORT

LSO PROJECT 813



SECURITY ASSISTANCE

DATA ELEMENT CATALOG (SADEC)

SEPTEMBER 1980



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LOGISTICS STUDIES OFFICE PROJECT NUMBER 813

FINAL REPORT

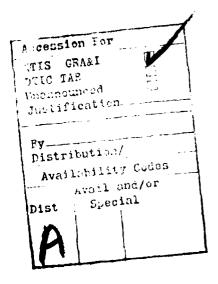
SEPTEMBER 1980

PETER J. HIGGINS

LOGISTICS STUDIES OFFICE
US ARMY LOGISTICS MANAGEMENT CENTER
FORT LEE, VIRGINIA 23801

ABSTRACT

This report describes the work to compile a single catalog of security assistance-related data elements from several systems. Regulatory guidance is dicussed as well as problems discovered in the abbreviations and definitions of some data elements. The major recommendations are to designate the US Army Security Assistance Center as custodian of security assistance data elements and to require system developers to adhere to the documentation standards in DOD Standard 7935.1-S.



Report Title: Security Assistance Data Element Catalog (SADEC)

Study Number: LSO 813

Study Initiator and Sponsor: US Army Security Assistance Center

ATTN: DRSAC-MS5

5001 Eisenhower Avenue Alexandria, VA 22333

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EXECUTIVE SUMMARY

- 1. <u>Purpose</u>. The purpose of this study is to catalog all security assistance-related data elements to provide analysts and managers information concerning data elements used to manage security assistance.
- 2. <u>Background</u>. A major problem facing security assistance management is the lack of data or the inability to locate data necessary to make management decisions. The US Army Security Assistance Center (USASAC) is responsible for operational management and control of the US Army Security Assistance Program. As a result, USASAC is frequently required to provide rapid and accurate responses to inquiries of customer countries and higher authority within the US Government.
- 3. Objectives. The objectives of the study are:
- a. To provide a "first step" in the documentation of included security assistance systems by providing selected essential information on each data element to the respective systems.
- b. To consolidate security assistance-related data elements into a single reference to aid the managerial process.
- c. To construct a data element reference and to facilitate retrieval of the information recorded therein.
- d. To report findings and provide recommended instruction for continual updating of the Security Assistance Data Element Catalog (SADEC).
- 4. Findings and Conclusions.
 - a. Findings.
- (1) No Data Element Dictionary (DED) or glossary of terms exists for some current Automatic Data Processing (ADP) systems.

- (2) Some commonly used terms have different names, abbreviations, and definitions assigned by different levels in the Department of Defense (DOD) hierarchy.
- (3) No single activity is currently responsible for maintaining security assistance data element integrity.

b. Conclusions.

- (1) Duplication of data element names, abbreviations, and definitions exists within and between information systems.
- (2) Maintenance of "Data Element Dictionaries" and/or glossaries needs increased attention by system proponents.

5. Recommendations.

- a. The US Army Security Assistance Center (USASAC) should be designated the US Army Security Assistance Data Element Custodian.
- b. The Data Element Custodian should maintain, update, and standardize data elements used in the Security Assistance Program.
- c. The Security Assistance Data Element Custodian should broaden the scope of the Security Assistance Data Element Catalog to include all data elements used to manage security assistance.
- d. System developers should adhere to DOD Standard 7935.1-S, Automated

 Data Systems Documentation Standards, and be held accountable for correct system implementation.
- e. Require system proponents to institute programs to standardize codes and definitions consistent with guidance from the highest level in the DOD hierarchy.

MAIN REPORT

SECTION I - SECURITY ASSISTANCE DISCUSSION

- 1. <u>Purpose</u>. The purpose of this study is to catalog all security assistance-related data elements of the systems incorporated in this effort into one reference giving analysts and managers essential information concerning each data element listed. Specifically, the study effort was directed toward the design and construction of an abbreviated Data Element Dictionary (DED) and to provide instructions for updating the catalog.
- 2. Background. Prior to 1973, security assistance played a minor role in the Army supply operation. Due to its size and the relatively simple regulatory procedures then in effect, it was not difficult to manage. Security assistance requirements were rolled up with those of the Army into one consolidated requirement for each item of materiel/services. Since 1973, security assistance has become a major factor in Army procurement programs. Security assistance organizations are now separate entities; and in Fiscal Year (FY) 1979, the value of security assistance procurement exceeded 14 percent of the total US Army procurement. The actual value of new DD Form 1513 FY 79 security assistance agreements was over \$13 billion according to the Congressional Presentation, Security Assistance Program, FY 1981. Because of the dollar value and political implications of security assistance, more intensive management capability is now required. A major problem currently facing security assistance management is the lack of data or the inability to locate data necessary to make management decisions. The US Army Security Assistance Center (USASAC) is responsible for operational management and control of the US Army Security Assistance Program.

As a result, USASAC is frequently required to provide rapid and accurate responses to inquiries of customer countries and higher authority within the US Government.

3. Problem.

- a. It is often difficult and time consuming to trace the source of security assistance data given the numerous systems employed in its management. This task is made even more onerous by the fact that no list of data elements was produced ever before or after some systems were developed.
- b. Once the source of data is known, it must be considered in the light of the definition assigned it by the system proponent. Without such data element information available to the manager/analyst/researcher, varied meanings may be assigned to correspond with the needs of the user. Standardization of data element names, abbreviations, codes, and definitions would reduce this problem when multiple systems or people are involved.

4. Objectives. The objectives of the study are:

- a. To provide a "first step" in the documentation of included security assistance systems by providing selected essential information on each data element of the respective systems as submitted to the study agency by the system proponents.
- b. To consolidate security assistance-related data elements into a single reference to aid the managerial process.
- c. To construct a data element reference and to facilitate retrieval of the information recorded therein.
- d. To report findings and provide recommended instructions for continual updating of the Security Assistance Data Element Catalog (SADEC).

5. Limits and Scope.

- a. The study was limited to record specific information on data elements in each of the sponsor-selected systems listed below:
 - Commodity Command Standard System (CCSS).
 - Centralized Integrated System for International Logistics (CISIL).
 - Army Customer Order Control System (ACOCS).
 - Defense Security Assistance Agency 1000, 1100, and 1200 Systems.
 - Army Procurement and Reporting System (APARS).
 - DARCOM Headquarters Management Information System (HQ MIS).
 - Defense Integrated Financial System (DIFS).
 - Program 10 Support to Other Nations.
- b. Although ten systems were originally to be incorporated in this study (three from DSAA), data was received from only three systems. The study agency was not assured of receiving data from the nonresponding system proponents within the time allotted to perform this study; therefore, the study was terminated with the recommendation that as further systems respond the catalog would be updated to include them.
 - c. The three systems responding were:
 - Commodity Command Standard System.
 - Centralized Integrated System for International Logistics.
 - DARCOM Headquarters Management Information System.
- d. Proponents of the other systems either failed to respond to the data request or the study sponsor removed the system from the study effort consideration. Appendix H details reasons for the failure to obtain data from these systems.
- e. The specific information requested by the study sponsor for each data element included:
 - (1) Data element name.
 - (2) Data element abbreviation.
 - (3) Proponent office symbol.

- (4) Standardization level: Department of Defense (DOD), Department of the Army (DA), US Army Materiel Development and Readiness Command (DARCOM), other or blank if not standardized.
- (5) Standard Data Element (SDE), Interim Data Element (IDE), or blank if neither.
 - (6) Effective date of standardization.
 - (7) Definition as defined by the system proponent.
 - (8) DARCOM Systems Management and Control Structure Code.

The computer system abbreviation or acronym was added by the study agency to aid in the cross-checking of similar data element names, abbreviations, and definitions between the different systems.

- 6. Methodology. The methodology employed in the course of the study included:
 - a. Bibliographic/regulatory search and literature review.
 - b. Personal and telephonic interviews.
 - c. Data collection visit to USASAC.
 - d. Formal data calls to agencies responsible for the data systems.

7. Computer Programs.

- a. Computer programs developed to print the first two sections of the SADEC are listed in Appendix F with excerpts of their products. The last two sections of the SADEC were constructed using a combination of programs and utility sort programs on the US Army Logistics Management Center's Hewlett-Packard 3000 computer.
 - b. Recommended updating procedures are discussed in Appendix G.
- c. Annex A to this report is a hardcopy listing of the SADEC, and Annex B (provided only to the study sponsor) is a magnetic tape containing the catalog, programs, and the files necessary to generate the SADEC.

8. System Proponents and Relationships.

- a. The system proponent for CCSS, the US Army Automated Logistics Management System Activity (ALMSA), provided a magnetic tape of only those data elements used in International Logistics (IL) (as requested) based on the DARCOM Systems Management and Control Structure Code. This tape, edited to comply with the needs of this study, became the CCSS file.
- b. USASAC is the proponent for CISIL. CISIL was developed by using many data elements from CCSS; however, no DED existed for CISIL which necessitated a manual effort by the study agency and USASAC.
- c. USASAC also is responsible for the security assistance portion of the HQ MIS. The Security Assistance part of HQ MIS was developed basically as a CISIL spin-off using some of the CISIL files and data elements. Since no DED was available for HQ MIS, manual efforts were again necessary to compile one.
- d. Data element information used in this study is considered to be current as of the dates listed below:

System	Current as of
ccss	1 Mar 80
CISIL	12 Jun 80
HQ MIS	15 Aug 80

9. Catalog Format.

a. The process of developing a catalog of security assistance data elements can be a simple job for any number of systems if the raw data is provided in a standard format on magnetic tape. The process used in developing this catalog is straightforward and permits catalog expansion. The design and construction does not limit the number of systems or the number of data elements which can be cataloged. With minor programming, the data format can be rearranged and additional data fields can be added for each data element.

- b. Computer techniques were used for speed and accuracy of compilation. A separate file was set up for each system to store the data elements (and data element information). This permitted all necessary editing to be done one time and provided a file for each system in the catalog.
- c. The three files are named with the system abbreviation for the data they contain. For example, the file for CISIL was named CISIL (CCSS and HQ MIS are the names of the other two files).
- d. The data call (Appendix C), sent out by the study sponsor, contains the file format used in this study. A new system proponent responding to this data call with a magnetic tape can quickly have its system data elements added to the catalog with minor modification to the simple programs used in this effort.
- e. The Security Assistance Data Element Catalog (SADEC) is divided into four sections:
- (1) <u>Section A</u>: Summary of Information Collected for Each Data Element, Listed Alphabetically by Data Element Title. (Program Title: SADECA)
- (2) <u>Section B</u>: Alphabetic List of Data Element Names with System Abbreviation. (Program Title: SADECB)
- (3) <u>Section C</u>: Alphabetic Listing of Data Element Abbreviations with Data Element Name and System Abbreviation.
- (4) <u>Section D</u>: Alphabetic Listing of Data Element Names in DARCOM Systems

 Management and Control Structure Code Sequence.
- f. Each section requires a separate computer program to extract the correct information from the SADEC master file and print it on the line printer. The programs are listed in Appendix F with examples of their products.

- g. Each line of the individual catalog entry is coded with a card number located in card columns 79-80 of the SADEC master file. The number 1 card (_1) contains the data element title, and the number 2 card (_2) contains the data element abbreviation. The system abbreviation, proponent office symbol, and standardization information is located on the 3 card (_3). The data element definition begins on the 4 card (_4) and continues in sequence on the remaining cards until the entire definition is loaded. The last entry is the DARCOM Systems Management and Control Structure code on the 99 card (99).
- (1) Modifications to this format will permit the inclusion of more data files for each entry.
- (2) Further examination of the data call in Appendix C will reveal the actual card columns in which each data field is entered. Attention to proper columnar placement is necessary to insure each field is correctly printed.

10. Security Assistance Data Element Catalog (SADEC) Maintenance.

a. The SADEC will enable the Security Assistance Data Element Custodian to correct duplications if such authority is given. Section A lists the total information collected for each data element in the format described in the data call. Section B displays in alphabetic sequence the data element names and the system(s) in which it is found. Duplicated names are listed adjacent to each other; and by checking Section A of the catalog, the custodian can determine if the entire entries are duplicated or not. Likewise, Section C lists duplicate data element abbreviations in sequence with their respective system abbreviations. Section D lists the data elements with common DARCOM Systems Management

and Control codes. Analysis of Sections B, C, and D facilitate cross-checking of the lists of data elements and can be useful for determining duplications.

b. Correcting errors, omissions, and duplications is beneficial to data elements currently in use. This catalog may also enable the custodian to prevent the addition of data elements when it would duplicate data elements already in existence. This second benefit will require a person or staff knowledgeable in the specific subject area with the authority to direct individual system proponents to rename a data element or use another in lieu of the one submitted. This will require direction from a higher level.

SECTION II - OBSERVATIONS BEYOND THE SCOPE OF THE STUDY

1. Regulatory Discussion.

- a. Standardization of data elements cannot properly be described as a study function; consequently, the tasking document placed no requirement to standardize data elements on the Logistics Studies Office (LSO). The compilation of this catalog can be considered as a necessary first step in that direction.
- (1) Department of Defense Standard 7935.1-S, Automated Data Systems Documentation Standards, 13 September 1977, describes the Data Requirements Document in Part 2, subparagraph 2.4.2, Item B, and the term "data element" used "...refers to a data element or to its use in a data system...." It further states that:

The names and associated codes of many data elements have been standardized in order to facilitate data exchange and commonality of data structures. These standard data elements and data element codes shall be used whenever applicable in all data base files.

- (2) DOD Standard 7935.1-S, Part 2, subparagraph 2.4.2, Item c:
 - ...When a data processing system is designed that uses standard data elements...any existing data element libraries should be updated to reflect new uses.
- (3) Within these two quoted passages are given the basic tenets of standardization of data elements. One, standard data elements will be used when applicable to all data base files; and two, when you use a standard data element, the existing data element libraries must be updated to reflect the new use to which that data element is put. In this way, data base libraries are updated and unneeded data elements are not developed since existing data elements are employed.
- (4) Standardization of data elements is properly within the scope of work for any system developer/proponent. The following excerpts from selected

regulations provide the framework within which use of data elements is governed. The regulations quoted are not intended as all inclusive, but merely to point out that regulatory guidance pertaining to data elements already exists and the shortcoming is in compliance.

b. Department of Defense Directive (DODD) 5105.22, Defense Logistics Agency (DLA), 8 June 1978, includes a cataloging function to:

Develop and maintain the central, single, official record of Federal Catalog data for all items of supply in the Federal Catalog system, including all identification and classification data and those elements of management data appropriately contained therein. (E.2.c.)

- c. The Defense Logistics Services Center (DLSC), a subordinate of the Defense Logistics Agency, mairtains the Defense Integrated Data System (DIDS) and publishes the standard codes and definitions of data elements in DOD 4100.39-D (Defense Integrated Data System Data Element Dictionary).
- d. Department of Defense Instruction (DODI) 5000.12, Data Elements and Data Codes Standardization Procedures, 27 April 1965, contains definitions of terms useful to this study. These terms are entered at Appendix D to this study.
 - (1) Selected policies outlined in DOD! 5000.12, paragraph IV, are:
 - A. Data Elements will be identified, defined, classified and coded in a uniform manner. Those Data Elements and related features which can be applied to more than one data system or organization will be published as DoD standards to be utilized to the greatest practicable extent.

* * * * * * *

C. Data Elements may be developed, defined, coded and applied on an interim basis when standard Data Elements do not exist or do not meet data system requirements. Interim Data Elements will be cataloged and referred to the Assistant Secretary of Defense (Comptroller) for determination as to their acceptability as standard Data Elements.

* * * * * *

- E. Data Elements and related features used by DoD components in existing data systems and those developed by industry and other Government agencies will be considered for standardization where feasible.
- (2) DODI 5000.12 also lists certain standardization criteria for data elements under paragraph A.2 of the inclosure titled "Explanation and Criteria":
 - a. Each Data Element will be given a unique name.
 - b. A Data Element may be given a unique mnemonic abbreviation.
 - c. Each Data Element will be given a precise and succinct definition. It will have a meaning significantly different from any other Data Element. The definition will have only one acceptable interpretation. The definition will be thoroughly developed and tested to minimize ambiguity. The definition should first basically state "what the Data Element is" and then, if needed, further amplify to clarify understanding. Existing definitions in current publications should be used to the extent that they meet the above criteria.
- e. One of the principal objectives of the Army Management Information Systems (AMIS), as stated in AR 18-1, Chapter 1, paragraph 1-2g, is to: "Seek AMIS economies by--(1) Disciplining systems growth through standardization of functional applications and reduction of unique systems.", and "(5) Reducing, consolidating, and/or integrating, where applicable, duplicative reports, files, and data bases."
- f. The Army Information Processing Standards (AIPS) program, established by AR 18-1, paragraph 4-1, "...complements the DOD Information Processing Standards for Computers IPSC Program (DODD 4120.3) and implements the DOD Data Element and Codes Standardization Program (DODD 5000.11)." The AIPS program standardization objectives regarding data, stated in AR 18-1, paragraph 4-2, include:
 - a. Facilitate interchange and compatibility of data, computer components, and devices among Department of the Army information and data systems and those of other Government agencies.

.

d. Reduce data processing costs by using standard data codes in lieu of the full description of the data items.

Thus, standardization of data elements should be advanced to aid implementation of the objectives listed in AR 18-1.

- g. Department of the Army (DA) policies in support of the AIPS program objectives are listed in AR 18-1, paragraph 4-3. Excerpts from those AIPS policies related to data elements and codes are:
 - 4-3b. Data elements and codes that can be used in more than one information or data system will be considered for standardization.
 - c. Data elements and codes that are currently in use will, where feasible, be adopted as Army standards.
 - d. A data use identifier name, abbreviation, and definition, when added to a standard data element, become part of the standard.
 - e. Standard data elements emanating from the Federal Government, industry, American National Standards Institute, or other standards organization will not be implemented within Department of the Army without prior approval from USACSSEA (US Army Computer Systems Support and Evaluation Agency).
 - f. Applicable standard data elements and codes will be used when providing or interchanging data in automated form between or among two or more systems, organizations, DOD components, or Federal agencies. An activity which implemented standard data elements and codes and used them in a data transfer or interchange will bear no part of the costs required for code translation or conversion necessary to effect the data transfer or interchange. All such costs will be borne solely by those parties to the data transfer or interchange who did not implement the applicable standard data elements and codes.
- h. The AIPS program is managed by the US Army Computer Systems Support and Evaluation Agency under provisions in AR 10-8, Organization and Functions, US Army Computer Systems Selection and Acquisition Agency, and is tasked with program responsibilities in AR 18-1 that include:

4-4b(2) Establishing procedures and criteria for identifying, classifying, developing, documenting, and coordinating proposed interim and standard data elements and codes, and applying and maintaining approved standards.

(4) Providing -

- (b) The staff point of contact with OASD(C), the DOD components, and other Governmental agencies and non-Governmental organizations on data element standardization and related projects.
- (5) Designating the APOC (Army Point of Contact)...for data element standardization assignments.
- (10) Insuring coordination of proposed DOD standard data elements, and recommending DMIS approval of the proposed Army response to the DOD assigned responsible agency.
- (13) Serving as the HQDA proponent for the DA Data Element Management System (DADEMS) for Interim and Standard Data Elements and Codes.
- 4-4c. Army staff agencies and major Army commands are responsible for...
- (3) Developing and recommending data elements and codes to HQDA for approval as Army standards.
- 4-46. Responsibilities of the Army point of contact for a DOD data element standardization project are as follows:
- (1) When a DOD component other than the Army is ARA (Assigned Responsible Agency) for a DOD project, APOC (Army Point of Contact) responsibilities include, but are not limited to--
- (a) Participating with the ARA in the development of proposed DOD standard data elements.

- (b) Army wide coordination of the proposals.
- i. The responsibility of the US Army Materiel Development and Readiness

 Command activity commanders in regard to data elements is specified in DARCOM-R

 18-17. Chapter 2:
 - 2-3. Responsibilities.
 - a. The commander of each DARCOM activity will:

* * * * * *

(6) Assure that all data elements that will be used on a recurring basis are entered in the Data Element Dictionary in accordance with volume 4, DARCOM-R 18-5.

This statement infers that the DARCOM Data Element Dictionary (DED) will be checked first to find out if a current data element can be used instead of developing a new data element, and it also places a heavy responsibility on the US Army Automated Logistics Management Activity (ALMSA). As manager of the DARCOM DED, ALMSA must insure that all data elements incorporated are reviewed and all necessary system maintenance (amend, add, and delete) is performed. There is no incentive to use the DED if it is not accurate.

j. By rigorous discipline in the application and enforcement of the existing policies, duplicated costs in time, money, and inconvenience can be avoided and full data interchange between systems can move towards reality. The primary thought for system designers should be to develop the best system for the situation. Since time constraints are always a fact of life, the use of data elements already in existence (whenever possible) appears to offer substantial savings in development time. System integration offers greater savings than system uniqueness. Use of standardized data elements and the coding associated therewith should cut development costs, offer system compatibility, and stem the proliferation of data element redundancy.

- k. When a desired data element does not already exist, one should be developed having the necessary characteristics without any features preventing its use by other systems.
- (1) In all cases, steps should be taken at the earliest possible time to standardize data elements. This should be viewed by all concerned as an investment with the resulting savings as the profit.
- (2) The situation with which we are faced (numerous systems, most with their own brand of uniqueness be it data element name, abbreviation, coding, editing criteria, etc.) is the price we are now forced to pay for the lack of adherence to the policies set down in the regulations previously cited.
- 1. Effective corrective action taken <u>now</u> will be difficult, expensive, and time consuming, but the task, if started now, can be accomplished more easily (and economically) than by waiting until additional nonstandard, unique, and incompatible systems and data elements are adopted.
- m. The task within each service requires direction and support from the highest level and must be coordinated by DOD to assure standardization among the services. The services must work together since this problem requires concerted effort in its solution.

2. Data Element Discussion.

a. As previously stated, the study requirement was to develop a catalog of security assistance-related data elements and information gathered from the respective system proponents. While the sponsor placed no requirement to standardize data elements or to examine the information gathered (save for obvious errors) certain inconsistencies were discovered which need correction by system proponents.

- b. The reader is forewarned that the following examples are not intended as a complete listing of the types of errors to be found in this catalog or the systems in general. Rather, the examples point out the need for a continuing program of system maintenance and that additional work is needed before a common set of data elements can be used by separate data systems.
- c. Several types of problems in the Centralized Integrated System for International Logistics (CISIL) are offered as evidence that additional work is needed on CISIL data elements:
- (1) <u>Multiple Abbreviations</u>. These examples, found in CISIL, consist of data elements with identical names but different abbreviations. The first example is "ACCESSORIAL CHARGE CODE." This data element (as used in the Materiel Request History and Status file) is listed twice, each time with a different abbreviation. They are:
 - ACCESS-CD
 - ACCSL-CHG-CD

Interestingly enough, the same definition is used in both instances but the proponent office symbols and the DARCOM Systems Management and Control Structure Codes are different.

- (a) It is easy to see how confusion can result with this type of problem. The next level of investigation, beyond the scope of this study, would be to determine whether the coding elements used are the same in both instances. The question "Is this one data element or two?" arises; and in either case, we are faced with a mixture of information.
- (b) It is difficult to understand how a situation of multiple abbreviations such as this could develop. This situation occurred in one file, so comparison of data elements could easily be conducted by one person.

- (c) Interviews with several personnel at the US Army Security Assistance Center New Cumberland Army Depot (USASAC-NCAD), proponent of CISIL, indicated the cause as being a short cut in the Common Business Oriented Language (COBOL) programming process. They explained that it is easier to set up a separate abbreviation than to write a more lengthy and detailed program to cover the situation. In this case, expedience won out over the more correct but time-consuming approach.
- (2) <u>Multiple Names</u>. The second example is of three data element names with the same abbreviation, definition, proponent office symbol, and DARCOM Systems Management and Control Structure code, and all three are found in the same CISIL file (Transportation Master). The abbreviation is "DT-EN," and the three names are:
 - DATE ENTERED
 - DATE RECEIPT RECEIVED
 - DATE TCMD RECEIVED

The cause of multiple abbreviations, as explained by USASAC, is different programmers working on different programs. This points out the need for a data element referee or custodian to arbitrate such problems and to standardize the data elements used in the system.

- (3) <u>Multiple Definitions</u>. The third type of problem encountered is represented by the data element name "IL CONTROL NUMBER." In this instance, the problem is that of a data element having two different definitions while sharing the same name, abbreviation ("IL-CON-NO"), and DARCOM Systems Management and Control Structure code. The proponent office symbols are different as are the files in which they are used. The definitions are:
 - (a) Four digit case designator/case designator suffix code.

(b) A record control number is indicated if the international logistics (IL) program is grant aid. If the IL program is foreign military sales or a supply support arrangement, a three character alphabetic designator is furnished.

It does not appear as though these two definitions have the same meaning or intent.

- (4) A combination multiple abbreviation/definition problem is indicated by a third data element "IL CONTROL NUMBER" having the abbreviation "IL-CON-NR." Even though the definition for "IL-CON-NR" matches that in paragraph 2c(3)(b) of this section, other information such as proponent office symbol, DARCOM Systems Management and Control Structure code, and the file it is used in do not match the corresponding information for the earlier example in paragraph 2c(3)(b) of this section.
- (5) Another type of problem concerns the terms ''NATIONAL STOCK NUMBER' and ''NORTH ATLANTIC TREATY ORGANIZATION STOCK NUMBER.''
- (a) Confusion between which of these terms is correct requires an explanation prior to delving into the actual problem to be discussed.
- 1 The term "NORTH ATLANTIC TREATY ORGANIZATION STOCK NUMBER" (abbreviated "NATO-STOCK-NO") is defined in the July 1979 DARCOM DED as:

The National Stock Number which contains the North Atlantic Treaty Organization Code (NATO) between the Federal Supply Class (FSC) and the National Item Identification Number (NIIN). The NATO plus the NIIN equal the National Item Identification Number (NIIN).

- $\underline{2}$ This definition is ill worded at the end. What is meant is that the NATO plus the old NIIN combines to form a new NIIN. Any other reading leaves the author with the impression of a typographical error and errant editing.
- 3 Additional confusion results in looking at the abbreviation of "NORTH ATLANTIC TREATY ORGANIZATION STOCK NUMBER." As listed in the July 1979 DARCOM

DED, the abbreviation is "NATO-STOCK-NO." It is feared that lack of publicity leads most DARCOM personnel to believe that the abbreviation for "NORTH ATLANTIC TREATY ORGANIZATION STOCK NUMBER" is "NSN."

- (b) The real problem, uncovered when editing entries for correctness, is the multiplicity of definitions to be found for the term "NATIONAL STOCK NUMBER."
 - 1 The CCSS (DARCOM DED, July 1979) definition is:

A number assigned under the Federal Cataloging Program to each approved United States Federal Item Identification. It consists of the four digit Federal Supply Classification (FSC) and the nine digit assigned National Item Identification Number (NIIN).

The definition listed in the April 1980 Customer Relations Newsletter, Appendix A (Definitions of Data Elements), published by the Defense Logistics Services Center, is:

A thirteen-digit number of which the first set of four digits represents the Federal Supply Classification (FSC), the second set of two digits designates a National Codification Bureau (NCB) code. The NCB and the remaining set of seven digits represents the National Item Identification Number (NIIN).

- 3 The Defense Integrated Data System DED (DOD 4100.39-D) does not list or define "NATIONAL STOCK NUMBER NSN."
- 4 A third definition is listed in AR 310-25, Dictionary of United States Army Terms, 15 September 1975. Confusion immediately is evidenced in the title of the term which contains both national and NATO:

national/NATO stock number (A) - A two-part number assigned to each item of supply repetitively used, purchased, stocked, or distributed within the Federal Government. The first part of the number consists of the applicable four-digit class code number of the Federal Supply Classification. The second part of the number consists of a series of nine numerals and is known as the National Item Identification Number. The National Stock Number will be referred to whenever addressing United States material management functions. The term "NATO Stock Number" will be referred to whenever addressing material management functions of NATO Headquarters or individual NATO countries.

Note that AR 310-25 offers no abbreviation for the term, and this more lengthy definition contains the essence of the DARCOM definition but does not capture the more detailed explanation offered by the Defense Logistics Services Center definition.

5 The term "NATIONAL STOCK NUMBER" is defined in the Joint Chiefs of Staff Publication 1 (JCS Pub. 1), Department of Defense, Dictionary of Military and Associated Terms, dated 1 June 1979, as follows:

National Stock Number - [DOD]. The 13-digit stock number replacing the 11-digit Federal Stock Number. It consists of the 4-digit Federal Supply Classification code and the 9-digit National Item Identification Number. The National Item Identification Number consists of a 2-digit National Codification Bureau number designating the central cataloging office of the NATO or other friendly country which assigned the number and a 7-digit [XXX-XXXX] nonsignificant number. The number shall be arranged as follows: 999-00-999-9999. See also Federal Stock Number.

Notice the term is National Stock Number; NATO Stock Number is not listed in JCS Pub. 1.

c. Just as the lack of publicity over the correct abbreviation for NATO Stock Number and National Stock Number is confusing, so too is this definitional problem between the different sources listed.

3. DARCOM Systems Management and Control Structure Code.

a. The purpose of the DARCOM Systems Management and Control Structure code is described in AMCR 18-5, Volume 2, paragraph 1-1, as: "...provide a means of classification and control through the mission, cell, and subcell structure of all manual and automated information and data systems established and utilized throughout the..." US Army Materiel Development and Readiness Command. This code classifies DARCOM missions, functions, and subfunctions and those data elements therein. Each data element is assigned a separate code for each combination of

mission, cell, subcell, and management activity. The DED Management Activity Code identifies the activities using the data element for the application signified by the mission, cell, and subcell coding. ALMSA has responsibility for updating this entire code and recording it in their DARCOM DED.

- b. This study relates generally to the mission designated as "4" (Logistic Support) and in particular to the cell (or function) labeled "F" (International Logistics). Within the "F" cell, there are 11 subcells (subfunctions) coded "Ol" through "11." Appendix E of this report contains selected pages of DARCOM-R 18-5, Volume 2, Appendices A, B, and C relating to the DARCOM Systems Management and Control Structure code.
- c. By examining the DARCOM Systems Management and Control Structure code, an analyst can determine the users of any data element and the application (down to subcell level) for which it is used. However, when checking CISIL data elements against the Commodity Command Standard System (CCSS) DARCOM DED, it was found that CCSS did not record USASAC (CISIL proponent) as user of some data elements copied from CCSS as CISIL was developed.
- (1) An example is the term "NATIONAL STOCK NUMBER" used in CISIL and in CCSS. This term, as were many other terms, was originally copied from CCSS because that system had a fairly complete DED and it was practical to use these terms.
- (2) The term "NATIONAL STOCK NUMBER" appears in the complete CCSS DED, but does not have a DARCOM Systems Management and Control Structure code listed with the necessary "F" cell to denote International Logistics and therefore does not appear in the Security Assistance Data Element Catalog (SADEC) with CCSS as the proponent.

- (3) This is one example of a term which possibly should have a code designating it as being used in security assistance. If such a common term lacks the proper coding, then we must question how many other data elements in the DARCOM DED are lacking complete coding or are incorrectly coded.
- (4) ALMSA cannot control which organizations use terms from the DARCOM DED so they are not totally responsible for incomplete coding. However, ALMSA should take the lead (as the proponent for the DARCOM DED) in assuring the information entered in their DED is as accurate and complete as possible.

SECTION III - SUMMATION

1. Summary.

- a. When manpower, dollar, and time constraints are placed on a system developer and career evaluations (civilian and military) are based on the timeliness of project completion, short cuts will be taken. Documentation of data elements appears to be an area where short cuts are taken and seldom corrected. As programmers and functional specialists take other jobs, we (the Army) find ourselves with a system containing unnecessary duplication, new personnel unfamiliar with the system origin, and no resources to correct the situation.
- b. Enforcement of existing regulations and implementation of the recommendations listed below will promote objective number four (4) of the Security Assistance goal in DA Pam 701-1, Direction for Army Logistics, January 1980. This objective is to: "Establish an improved management information system for the security assistance program." This study effort is particularly relevant to two of the action items of this objective. They are:
- (1) "Develop the essential elements of information required to manage security assistance program" and
- (2) "Develop and implement a comprehensive plan to obtain these elements of information."
- c. The Security Assistance Data Element Catalog (SADEC) Custodian should receive notification as changes occur to the data elements of feeder systems. These changes can then be made to the SADEC to keep it up to date.
- d. Publication of the SADEC should be made at least quarterly so that data element changes are broadcast to potential users. Due to the volume of

paper and time required to print the SADEC, distribution on microfiche may offer a solution to the cost of distribution.

2. Findings.

- a. No Data Element Dictionary (DED) or glossary of terms exists for some current Automatic Data Processing (ADP) systems.
- b. Some commonly used terms have different names, abbreviations, and definitions assigned by different levels in the Department of Defense (DOD) hierarchy.
- c. No single activity is currently responsible for maintaining security assistance data element integrity.

3. Conclusions.

- a. Duplication of data element names, abbreviations, and definitions exists within and between information systems.
- b. Maintenance of Data Element Dictionaries and/or glossaries needs increased attention by system proponents.

4. Recommendations.

- a. The US Army Security Assistance Center (USASAC) should be designated the US Army Security Assistance Program Data Element Custodian.
- b. The Data Element Custodian should maintain, update, and standardize data elements used in the Security Assistance Program.
- c. The Security Assistance Data Element Custodian should broaden the scope of the Security Assistance Data Element Catalog to include all data elements used to manage security assistance.
- d. System developers should adhere to DOD Standard 7935.1-S, Automated Data Systems Documentation Standards, and be held accountable for correct system implementation.
- e. Require system proponents to institute programs to standardize codes and definitions consistent with guidance from the highest level in the DOD hierarchy.

APPENDIX A

GLOSSARY OF TERMS AND ABBREVIATIONS

APPENDIX A

GLOSSARY OF TERMS AND ABBREVIATIONS

<u>A</u>	
ACOCS AIPS ALMSA AMC	Army Customer Order Control System Army Information Processing Standards US Army Automated Logistics Management Activity US Army Materiel Command (renamed US Army Materiel Development and Readiness Command) AMC Regulation
AMIS APARS APOC AR ARA	Army Management Information System Army Procurement and Reporting System Army Point of Contact Army Regulation Assigned Responsible Agency
<u>B</u> BASIC	Beginners All-Purpose Symbolic Instruction Code
CCSS CISIL COBOL	Commodity Command Standard System Centralized Integrated System for International Logistics Common Business Oriented Language
<u>o</u>	
DA DADEMS DARCOM DE DED DIDS DIFS DLA DLSC DMIS DOD DODD DODI DSAA	Department of the Army Department of the Army Data Element Management System US Army Materiel Development and Readiness Command Data Element Data Element Dictionary Defense Integrated Data System Defense Integrated Financial System Defense Logistics Agency Defense Logistics Services Center Directorate for Management Information Systems Department of Defense Department of Defense Directive Department of Defense Instruction Defense Security Assistance Agency

<u>F</u>	
FSC FY	Federal Supply Class Fiscal Year
<u>H</u>	
HQ DA HQ MIS	Headquarters Department of the Army Headquarters Management Information System (DARCOM)
<u>1</u>	
IDE IL IPSC	Interim Data Element International Logistics Information Processing Standards for Computers (DOD)
<u>1</u>	
JCS	Joint Chiefs of Staff
<u>L</u>	
LSO	Logistics Studies Office
<u>N</u>	
NATO NCAD NCB NIIN NSN	North Atlantic Treaty Organization New Cumberland Army Depot National Codification Bureau National Item Identification Number National Stock Number
<u>o</u>	
OASD(C)	Office of the Assistant Secretary of Defense (Comptroller)
<u>s</u>	
SA SADEC SADECA SADECB	Security Assistance Security Assistance Data Element Catalog Security Assistance Data Element Catalog, Section A Security Assistance Data Element Catalog, Section B

U

USACSSEA USASAC USASAC-NCAD US Army Computer Systems Support and Evaluation Agency US Army Security Assistance Center US Army Security Assistance Center - New Cumberland Army Depot

APPENDIX B

BIBLIOGRAPHY

APPENDIX B

BIBLIOGRAPHY

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APPENDIX C

DATA CALL



DEPARTMENT OF THE ARMY USA SECURITY ASSISTANCE CENTER SOO! EISENHOMER AVENUE ALEXANDRIA, VA 22333

DRSAC-MS/35

MAY 9 1980

SUBJECT: Catalog of IL-Related Data Elements

Director

Defense Security Assistance Agency

ATTN: Comptroller - Data Management Division

Room 48735 Pentagon Washington, DC 20301

1. The US Army Security Assistance Center (USASAC) has tasked the Logistics Studies Office at Ft Lee, VA to perform the study "Catalog of IL-Related Data Elements." The purpose is to consolidate basic data element information into a management tool which will facilitate quick and accurate responses to inquires of customer clients and higher authorities as well as aiding in the managerial decision-making process. I am positive you can see the merits of such an "on-line" management tool. In this regard, it is USASACs objective to provide your Agency a copy of the final product and also provide you periodic updates.

- 2. It is requested that you provide the desired information on the International Logistics (IL) data elements in your Defense Integrated Financial System as well as the 1200/1100/1000/systems on magnetic tape in the format described at Inclosure 1. A response by 15 June 1980 will be greatly appreciated.
- 3. The magnetic tape submission should be addressed to:

Commandant
US Army Logistics Management Center
ATTN: DRXMC-LSO (Mr. Higgins)
Fort Lee, Virginia 23501

1 Incl

as

DUANE R.W. MURTOMAKI

Chief, Systems Analysis Division Plans and Systems Analysis

CF: C-2

"mandant, US Army Logistics Management Center

"TN: DRXMC-LSO (Mr. Higgins), Ft Lee, VA 23801

| 東京学院学院は1967年19日本

FORMAT FOR MACHETIC TAPE

- 1. Request your submission be on magnetic tape, 9 track, 800 BPI, either ASCII or EECDIC (please specify) without labels or any special control characters.
- 2. For each Data Element entry, the requested format is:
 - a. Line 1. Blanks in cc 1-5.

 Data Element Name in cc 6-78.

 Blank in cc 79.

 1 in cc 80.
 - b. Line 2. Blanks in cc 1-5.

 Data Element Abbreviation in cc 6-78.

 Blank in cc 79.

 2 in cc 80.
 - C. Line 3. Blanks in cc 1-20.

 Proponent Office Symbol in cc 21-37.

 Standardization Level (enter DOD, DA, DARCOM, etc. if standardized) (Blank if DE has not been standardized) in cc 38-47.

 Enter SDE (for Standard Data Element) or IDE (for Interim Data Element) or leave blank if neither SDE or IDE in cc 48-50.

 Effective date of standardization (enter as YYMMDD) in cc 51-56 (blank if DE has not been standardized).

 Blanks in 57-79.

 3 in cc 80.
 - d. Line 4. Blanks in cc 1-5.

 DE Definition in cc 6-78.

 Blank in cc 79.

 4 in cc 80.

(Continue definition on lines 5-9 with corresponding number in cc 80, lines 10-97 will have a corresponding 10-97 in cc 79-80 in the same format as line 4 until the entire DE definition has been entered. This definition should not include input codes for the data described in the definition). Number each additional line required.

e. Line 99. Blank in cc 1-5
Enter applicable System Management and Control codes

cc 6-78 - 99 in cc 79-80

3. If the above format is impossible to follow, enter only the requested data on magnetic tape with a full hardcopy description of the tape format included to aid LSO retrieval.

APPENDIX D

SELECTED DOD! 5000.12

DEFINITIONS

APPENDIX D

SELECTED DODI 5000.12 DEFINITIONS

- Assigned Responsible Agency (ARA) DOD component receiving assignment to chair a working group of affected DOD components to develop a recommendation to the Assistant Secretary of Defense (Comptroller) for standardization of specific Data Elements and related features. After approval of a recommended specific standard by the Assistant Secretary of Defense (Comptroller), the ARA will maintain the standard by evaluating, approving, and coordinating changes in related features.
- Data Code A number, letter, character, symbol, or any combination thereof used to represent a Data Item. For example, the Data Codes "36," "04," and "06" might be used to represent the Data Items of Technical Sergeant, Major and Colonel under the Data Element "military personnel grade."
- Data Element A grouping of informational units which has a unique meaning and subcategories (Data Items) of distinct units or values. Examples of Data Elements are military personnel grade, sex, race, geographic location, and military unit.
- Data Item A subunit of descriptive information or values classified under a Data Element. For example, the Data Element 'military personnel grade,' contains Data Items such as Technical Sergeant, Major, and Colonel.
- Data System Combination of personnel efforts, forms, formats, instructions, and procedures, Data Elements and related Data Codes, communications, and data processing equipment, which provide an organized and interconnected means, either automated, manual, or a mixture of these for recording, collecting, processing, and communicating data.
- Pata Use Identifier The name given to the use of a Data Element in a data system. For example, the Data Element "State," when used in a system may be assigned a Data Use Identifier "State of Birth" or "State of Residence."

APPENDIX E

DARCOM SYSTEMS MANAGEMENT AND CONTROL CODE

APPENDIX E

DARCOM SYSTEMS MANAGEMENT AND CONTROL STRUCTURE CODE

1. Excerpt from AMCR 18-5, Volume 2, Appendix A, Mission Structure for Classification of AMC Information and Data Systems:

Mission	Description
1	Resources Management. A set of disciplines and procedures encompassing all of the processes involved in planning for the accomplishment of missions; estimating and establishing required resources; assigning time-phased objectives and tasks to operating agencies; issuing planning, programing, and budgeting directives; reporting, reviewing, and analyzing performance and resources utilization; and rendering managerial and operational decisions (AMCR 11-4, Vol. 1).
2	Scientific and Technical Development. Those management and support missions involved in the collection, storage, and dissemination of scientific and technical data in the conduct and support of research, development, test, and evaluation of materiel. Included are basic research, theoretical studies, scientific experiments, applied research, feasibility studies, engineering design studies, weapons system analysis, operations research, development engineering, fabrication of experimental models and prototypes, the conduct of scientific, technical, and weapons effect experiments; and tests for evaluation of articles built in-house, commercially procured, or received from foreign sources, and quality control testing of items for conduct of service tests
3	Item Data Control. Those management and support missions involved in the collection, storage, retrieval, and dissemination of technical logistic item data regarding: Design, provisioning, procurement, production, requirements, standardization, product assurance, calibration, value engineering, cataloging, technical manual preparation, maintenance returns, storage, issue, and disposal.
4	Logistics Support. Those management and support missions involved in stock control, international Logistics, provisioning, cataloging and transportation, and the establishment of a materiel pipeline to provide necessary items of equipment and supplies to a service, formation, organization, or unit in fulfillment of its objective.
5	Materiel Acquisition. Those management and support missions involved in determination of materiel requirements, development, procurement, production, and manufacture of Army materiel.

2. Excerpt from AMCR 18-5, Volume 2, Appendix B, Cell Structure for Classification of AMC Information and Data Systems:

Mission Cell	Description
4	Logistics Support.
44	Stock Control. Those management and support functions involved in maintenance of pertinent data on the quantity, location, and condition of supplies and equipment due-in, on hand, and due out and in management of supply operations so that distribution can be effected with a minimum amount of supplies and equipment in the distribution system.
4F	International Logistics. Those management and support functions involved in planning, programing, and reporting of materiel and services furnished to foreign countries under the International Logistics Program.
4M	Maintenance. Those management and support functions involved in maintaining material in a serviceable condition or to restore same to serviceability, including inspection, testing, servicing, classification as to serviceability, repair, rebuild, and reclamation. It also includes those functions involved in the production, scheduling, and control of items that will be overhauled, rebuilt, or repaired in-house or by contract; the schedule of maintenance support planning reporting system for management of major actions and support elements required to develop support for items of new material at initial issue; the Maintenance Engineering Analysis and Data System (MEADS) for collection, recording, analysis, retrieval, and production of maintenance engineering technical data and documentation including the concept, definition, development, and production phases of new material; cost and personnal utilization data for PE730000, Maintenance Support Services, including supporting programs; providing management data essential for the planning, production, and control over the AMC equipment publications program.
4x	Provisioning. Those management and support functions involved in the identification, establishment, or modification of catalog data, RPSTL, technical manual, item application data, and allowance table data, determination of or changes to range and quantity of items required to support end items; and the concurrent or continued delivery of necessary support items with related end items.

3. Excerpt from AMCR 18-5, Volume 2, Appendix C:

		L	Mission:	i i		Cel1:	<u></u>	
		7		Res	onsib	Responsibilities		
noi		SƏJ	Func Dir	D = Design X = Prog &		Maint		Consol
Miss Cell Subc	Titles and Description			ALMSA	LSSA	Design TECOM Other	Design Other	Data Bank
4 F	International Logistics Program (ILP).							
4 F01	International Logistics Requisitions Process. This process provides for the receipt, validation supply execution and status processing related to ILP requisitions, receipt of assets, backorder releases and billing. It also provides the ability to suspend supply execution, initiate action to frustrate/divert shipments when a case/program has been suspended by direction of higher authority or when funds allocated will be exceeded.	*	AMC IL/ AMC MS-E	× - 0				
4 F02		* * *	AMC 1L/ AMCMS-E	X - Q				
4 F03	4 FO3 Military Articles and Services List (MASL). This process pertains to the maintenance, verification and update of data in the MASL. It includes the processing of change requests relative to price, leadtime, type classification code and footnote code as well as recommended additions/deletions to provide planning, programing and budget data to management.	* *	AMC IL/ AMCMS-E	×-0				

* Hardcore

		'	Mission:	4		Ce 11:	i.	
				}	oonsib	Responsibilities		
nol		:rest	Func Dir	0 ×	D = Design X = Prog & Maint	Maint		Consol
ssiM [[5] Subc	Titles and Description	└	DMIS Div	ALMSA	LSSA	TECOM	Design Other	Data Bank
4 F07	h FO7 International Logistics Requisition/Status Process. This process accomplishes the necessary functions related to the preparation of ILC initiated requisitions (defined lines and concurrent spare parts), in-country pre- pared requisitions, and the receipt of advice/ supply status. It includes those edit valida- tion routines for format, posting of advice/ supply status, providing of status of country, and follow-ups to supply sources. On out- going requisitions, it includes that valida- tion for type of program, program authority, stock fund authority (DSA/GSA) and also special SIMEX and MIMEX procedures.	7	AMC IL/ AMC MS - E	X - Q				110
4 F08	These processes will include the reservation of funds, disbursements and liquidation of accounts payable, billed accounts receivable, maintenance of general ledgers. Included also are the functions for controlling, monitoring and expediting ILP closeouts. It includes the process related to the receipt of interfund billing and the preparation of an out-billing document for forwarding to US Army Finance and Comptroller Information Systems Command (USAFINCISCOM). The process also includes the functions related to the receipt of a constructive delivery document and forwarding of a billing document to USAFINCISCOM. Nonreimbursable deliveries will be recorded in the Master Program Case record.	7	AMCMS-E	X-0				ורכ

			Mission:	1: 4		Cell: F	Ł	
sion 		pe of erest	Func	Responsibilities D = Design X = Prog & Maint	ısibil ign ı E Ma	lities int		Consol
SiM Sub	Titles and Description	oo2 Int	UMIS Div	ALMSA LSSA	H	TECOM	Design Other	Data Bank
4 F09	F09 Supply Support Arrangement Foreign Military Sales Order (FMSO) and Catalog Data. These	7	AMC IL/ AMCMS-E	X-0				110
	are the processes necessary for a foreign country to buy support for in-country end items utilizing the US Army Supply System. Included the US Army Supply System.					7		
	secondary items, quantities and value of items to be stocked. FMSO 2 - Estimated Consumption.							
	In addition, catalog data are developed utili- zing the Army Master Data File and tailored to the particular countries needs.							
4 F10	4 F10 Discrepancy Report Process. These are functions related to the receipt, validation, and processing of country initiated discrepancies.	٦	AMC IL/ AMCMS-E	X - Q	· 			110
4 F11	4 FII International Logistics Program Reports. This process provides for the preparation of all recurring reports required by DOD, DA, AMC, and other Government agencies.	٦	AMC IL/ AMCMS-E	X-Q				11.0
	1						-	

APPENDIX F
COMPUTER PROGRAMS

APPENDIX F

COMPUTER PROGRAMS

- 1. Annex B to this report is a magnetic computer tape containing files and programs used in the construction of the Security Assistance Data Element Catalog. The master file is named SADEC and is a combination of the three system files named CCSS, CISIL, and HQ MIS. The system files contain all the data element information collected from each system.
- 2. The system files are included on the tape to permit each system to be updated as necessary and printed out individually.
- 3. Computer programs which generate the first two sections of this report.

 are also entered on the tape. The other two sections of this report were
 generated by using machine utility programs.
- 4. The program generating Section A of the SADEC is called SADECA:

```
SACECA

10 DIM ZS(84)

20 DIM AS(80)

30 FILES SADEC

40 LINPUT #1; ZS

50 DN END #1 THEN 120

60 AS=ZS(5,84)

70 PHINT AS(1,78)

80 IF AS(79,80)=*99* THEN DO

90 PRINT

100 DOEND

110 GOTO 40
```

120 END

5. The following excerpt of Section A shows the product of the above program:

ACCEPTANCE DATE ACPYR HG HIS DRSAC+UM/PF THE DATE THAT APPEARS ON THE DU FORM 1513 AND INDICATES THE DATE A FOREIGN BUYER AGREED TO ACCEPT THE ITEMS AND CONVITIONS CONTAINED IN THE OFFER. FORMAT OF DATE IS YIDUD. FORCE ACCEPTANCE DATES ACPUT HU MIS URSAC-CM/PF THE DATE THAT APPEARS ON THE DO FURM 1513 AND INDICATES THE DATE A FOREIGN BUYER AGREED TO THE ITEMS AND CONDITIONS CONTAINED IN THE UFFER. FURMAT OF VALE 13 14000. FOBCL ACCEPTANCE MATE 10-1904 CISIL DRSAC-UM/PF THE DATE THAT APPEARS ON THE DO FORM 1513 AND INDICATES THE DATE A FOREIGN BUYER AGREED TO ACCEPT THE ITEMS AND CONDITIONS CONTAINED IN THE OFFER. FURMAT OF DATE IS YYDDD. FUSCL ACCEPTANCE DATE 10-195A CCSS U TIXMU THE DATE THAT APPEARS ON THE ACCEPTANCE PORTION OF DD FORM 1513 AND INDICATES THE DATE A FUREIGN BUYER AGREED TO ACCEPT THE ITEMS AND CUNDITIONS CUNTAINED IN THE OFFER. FURMAT OF DATE IS YOUU. FUGCL

6. Section B of the SADEC is generated by the program named SADECB:

```
SAUECU
   10 31M Zal041
   SO DIM AP[OU]
   30 JIM 92 (90)
   40 DIM (5 (80)
   SU FILES SAULC
   BU LINPUT #1; 25
   10 JN END #1 THEN 180
   6U A3= 43 15,841
   90 IF AS (79,001 = " I" [HEN 00
        U5=A5[1,74]
  100
  110 JUENO
  120 IF A5179, 801 = " 3" THEN DU
        CS=AS(1,0)
  130
  140 00ENU
  150 IF LS <> " | THEN GOSUB 190
  160 CS=""
  170 3010 60
  180 E.IU
  190 PRINT USING 200185,CS
  200 IMAGE 74A,6A
  210 RETURN
```

.

7. The following is an excerpt of Section B of the catalog.

```
ACCEPTANCE DATE
                                                                                                          Hu MIS
ACCEPTANCE DATE
                                                                                                          HO MIS
ACCEPTANCE DATE
                                                                                                          MG MIS
ACCEPTANCE DATE
                                                                                                          CISIL
                                                                                                          CCSS
ACCEPTANCE DATE FISCAL YEAR
                                                                                                          CCSS
ACCESSORIAL BILL POST INDCTR
ACCESSORIAL BILLED VALUE
                                                                                                          CISIL
                                                                                                          HU MIS
ACCESSORIAL BILLED VALUE
                                                                                                          CISL
ACCESSORIAL CHARGE AMOUNT
                                                                                                          CCSS
ACCESSORIAL CHARGE BILLED
ACCESSORIAL CHARGE CODE
ACCESSORIAL CHARGE CODE
                                                                                                          CCSS
                                                                                                          CISIL
                                                                                                          CISIL
ACCESSORIAL CHARGE CODE
ACCESSORIAL CHARGE LINE NUMBER
ACCESSORIAL CHARGE LINE NUMBER
                                                                                                          CCSS
                                                                                                          CISIL
                                                                                                          CCSS
```

S. Section C of the catalog was produced with the aid of a utility sort program available on the Hewlett-Packard 3000 computer. Other computers will likely have different utility routines; therefore, no program is shown for this section. The master file SADEC was the source file.

9. Excerpts from Section C of the catalog are:

AC00*	HQ MIS
ACCEPTANCE DATE	CISIL
ACPT-DT DATE UF ACCEPTANCE	01016
	CISIL
ACCEPTANCE DATE	
ACPT+DT	ccss
ACCEPTANCE DATE	ccss
ACPT-UT-FY ACCEPTANCE DATE FISCAL YEAR	
ACPYR	HQ MIS
ACCEPTANCE DATE	

10. Section D of the Security Assistance Data Element Catalog was produced using the SADEC master file and utility programs available on the Hewlett-Packard 3000 computer used by the study agency. An excerpt from Section D is entered below to provide the reader with a glimpse of the product.

```
MAP UNDER RUUTING IDENTIFIER CODE
FUBCL CCSS
             MAP UNIT PRICE
FOSCL CISIL
FOBCL CCSS
             MAP UNIT PRICE
             MARK FUR
FOSCL CCSS
             MEDIA AND STATUS CODE
FUBCL CCSS
FOBCL CISIL
             METHOU OF FUNDING
             METHOD OF FUNDING CODE
FUBCL CCSS
             MISSILE ROUND INDICATOR
FOSCL CISIL
             MUNTH / YEAR CREDIT
FOOCL CESS
FOSCL CCSS
             MUNTH AND YEAR
FOECL HJ MIS NATIONAL STUCK NUMBER
FUBCL HU MIS NATIONAL STOCK NUMBER
FUECE CISIL MATTUMAL STUCK NUMBER
             NATIONAL STOCK NUMBER COUNT - PRESENT
FOBCL CCSS
             NATIONAL STOCK NUMBER COUNT - TOTAL
FORCE CISIL NATIONAL STUCK NUMBER END ITEM
FUECE CISIL NATIONAL/NATO STUCK NUMBER
```

APPENDIX G

RECOMMENDED SECURITY ASSISTANCE

DATA ELEMENT CATALOG (SADEC)

UPDATING PROCEDURES

APPENDIX G

RECOMMENDED SECURITY ASSISTANCE DATA ELEMENT CATALOG (SADEC) UPDATING PROCEDURES

- 1. Appendix C contains the format used in the construction of the security assistance catalog with one minor revision. The "99" card is used for entering the DARCOM Systems Management and Control Structure code. The format in the data call did not specify how these codes were to be entered, hence the need for clarification. To promote readability, two spaces should be placed between each five-digit entry on the "99" card line. This follows the pattern of the original catalog. If more than II entries are required on the "99" card line, a change to the program(s) will be necessary. It is suggested that a "98" card be used for this purpose.
- 2. The program language used in this effort is Beginners All-Purpose Symbolic Instruction Code (BASIC). Each system's file of cataloged data was placed into editor files to permit easy addition, deletion, or change as necessary. The programs use the editor file(s) as their source to print out the various sections of the catalog.
- 3. The three system files of the included systems are:
 - a. Commodity Command Standard System (CCSS).
 - b. Centralized Integrated System for International Logistics (CISIL).
 - c. DARCOM Headquarters Management Information System (HQ MIS).

The three files were merged into one consolidated master file called SADEC for Security Assistance Data Element Catalog.

- 4. The master file (SADEC) with the programs listed in Appendix F produce the complete Security Assistance Data Element Catalog. As data elements are added to, deleted, or changed in the present three systems, the necessary change is made to the particular system file (CCSS, CISIL, or HQ MIS). When an additional system is added to the SADEC, a new system file must be built and merged into the SADEC master file.
- 5. Because the study agency used the BASIC language on its HP 3000 computer and the agency to be tasked with updating this catalog is unknown, the programs at Appendix F are basically illustrative of the type programs necessary to maintain this catalog. The most difficult part of this project was obtaining raw data in a usable format. Many other computer languages can be used with the data in the files to produce similar results. Therefore, it may be necessary to write new programs or to rewrite the programs presented.

APPENDIX H

SYSTEMS FAILING TO PROVIDE DATA

APPENDIX H

SYSTEMS FAILING TO PROVIDE DATA

Reasons that all initially assigned systems are not included in this report and associated catalog fall into three categories:

- a. Deleted by study sponsor as containing insufficient numbers of data elements (APARS and Program 10).
- b. Lengthy delays reported by system proponents before the requested data would become available (ACOCS and DIFS).
- c. Systems under change or development with no DED available or long lead time projected for DED (DSAA 1000, 1100, and 1200).

END

DATE FILMED

DTIC